Contemporary Electronic Mailing List Use by Health Educators: A Content Analysis of HEDIR Messages

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ABSTRACT

The International E-Mail Directory of Health Educators (http://www.hedir.siu.edu), or HEDIR, is an electronic mailing list specifically developed to facilitate communication among health education professionals worldwide. The study objectives were to characterize the nature of HEDIR messages and assess how well HEDIR is meeting members' communication needs. Researchers developed a 126-item checklist to conduct a content analysis of HEDIR messages. Checklist sections included sender information; message format; exchange of ideas; unsolicited provision of information; topical information; and professional development. Two independent pilot studies established content and face validity, and the interrater reliability of the instrument, using pi coefficient, was computed for each item. Analysis was performed on 794 HEDIR messages, from January 1 to June 7, 2001, printed from the HEDIR Web site. Message senders were of either sex, and the majority were university educators (33.8%). Unsolicited provision of information represented the largest category of messages (47.4%), followed by inquiries for information (27.5%) and responses to inquiries for information (26.1%). The most frequently selected item was unsolicited referral to Web site (15.0%). There were fewer inquiries for opinions than for information. The ratio of responses:inquiries for individual items was greater for opinions than information. Only 6.4% of messages included announcements of positions and 5.7% included calls for papers/abstracts or announcements for upcoming conferences.

The *International E-Mail Directory of Health Educators* (http://www.hedir.siu.edu), or HEDIR, was introduced by Mark Kittleson, of Southern Illinois University, in 1992. Its three electronic directories facilitate communication among health education and promotion professionals worldwide. It began as a simple directory of e-mail addresses, collected initially at the health education chairs meeting of the Association for Advancement of Health Education in April 1992. In January 1994 it changed format and became an electronic mailing list. When it began life as an electronic mailing list, it included only 200 subscribers, and it has grown to more than 1,200 individual subscribers. More than 12,000 messages have been sent since 1994 (Kittleson, n.d.a). HEDIR was originally developed with only university health educators in mind, but it now encompasses health educators from diverse community, clinical, and work site settings, as well as graduate students in health education.

An electronic mailing list is a communication system that enables individuals to send e-mail messages to a general address, thereby sending the same message to all

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subscribers simultaneously. The stated purpose of HEDIR is to provide subscribers with a vehicle through which they can "share thoughts, ideas, job announcements, conferences (and calls for papers), requests for ideas, etc. It is to be used to help health educators communicate more effectively and efficiently." (Kittleson, n.d.b). Only one other prior study has attempted to establish the extent to which the HEDIR is fulfilling its stated purpose, providing for effective and efficient communication among health educators. Welle, Kittleson, and Ogletree (1995) conducted a content analysis of all e-mail messages received by HEDIR in its inaugural year, 1994. During that year, 382 messages were received, and these were analyzed in the study. Researchers developed a category scheme for assessing the nature of e-mail messages, consisting of the following.

- Job announcements
- Professional growth/current events
- Updated directory information
- HEDIR discussion
- Information request
- Reply to request for information
- Error messages
- Miscellaneous

Considerable emphasis was placed on identifying trends in HEDIR usage for that first year: February and March were the months with the highest message volume, and the summer months, May through August, were the lowest volume months. The category Information Request was consistently the most frequent category of message received, comprising one fifth of all HEDIR messages that year. Error messages was the second most frequent category (18.8%), reflecting the level of inexperience demonstrated by many early electronic mailing list members.

As noted earlier, the growth of the HEDIR since its inception has been tremendous. In the 7 years since the last content analysis was conducted (Welle et al., 1995), the membership has grown by 500%, and the volume of messages received annually has ballooned by nearly 300% (1994: 382 messages; 2001: 1,413 messages). Doubtless, over time the membership of HEDIR has also become more adept at using the service, and the frequency of error messages can be expected to have diminished. Certainly, many issues of interest to health educators in 1994 remain prominent in peoples' minds today. However, there are new developments in the health of Americans and the professional lives of health educators that are appearing in electronic mailing list discussion. For this reason, a new content analysis of HEDIR messages was undertaken, with the goal of characterizing the nature, format, and content of electronic mailing list messages received in 2001.

Table 1. Health Education Electronic Mailing List (HEDIR) Content Analysis Checklist Sections

Inventory Section	Number of Items
Section A, Sender information	14
Section A1, Sex of sender	3
Section A2, Professional identity of sender	11
Section B, Message format	6
Section C, Exchange of ideas	36
Section C1, Inquiry, information	11
Section C2, Inquiry, opinion	5
Section C3, Response to inquiry, information	13
Section C4, Response to inquiry, opinion	7
Section D, Unsolicited provision of information	19
Section E, Topical information	28
Section E1, Health content	10
Section E2, Professional training and practice content	18
Section F, Professional development	17
Section F1, Call for papers/abstracts	3
Section F2, Position announcement(s), etc.	7
Section F3, Forwarded announcements	7
Section G, Other	5

METHODS

Instrument

A checklist consisting of 126 items was developed, patterned after the earlier format used by Welle et al. (1995), for the purpose of conducting the HEDIR content analysis. The checklist was divided into sections containing similar items. Content and face validity for the instrument were obtained using a 12-member jury of experts. Jurors were professional health educators with 3 or more years of experience using HEDIR. They completed an instrument evaluation form, rating the appropriateness of each item on the proposed checklist, and commenting on checklist format and administration. Jury input resulted in only minor changes to the instrument (Table 1).

Pilot Test

Because the primary investigator engaged the services of three student research assistants, it was necessary to establish the interrater reliability of the checklist when used by four individuals. A sample of 43 HEDIR messages was obtained from the online HEDIR archives, dating from February 1 to February 8, 2001, and photocopied. All four researchers analyzed each of the 43 messages using the proposed checklist, recording comments and suggestions as they went along. After a meeting to discuss these comments and suggestions, the primary investigator computed *pi* coefficients for each of the messages analyzed. *Pi* is a measure of interrater reliability especially suited to the proposed instrument and is described in Bordens and Abbott (1988). The formula for

pi is: *Pi* = (Proportion actual agreement - proportion expected agreement)/(1-proportion expected agreement).

Two different approaches to computing *pi* for the checklist were adopted. One of the approaches involved considering partial agreements among researchers; that is, if two of the four researchers agreed on a particular checklist item, that item was scored .50, and if three of the four researchers agreed on an item, that item scored was .75. Predictably, this approach yielded slightly higher *pi* scores than the other approach, which involved scoring 1.0 for items only if all four researchers agreed. Regardless of the approach, *pi* coefficients for all 43 messages analyzed were very high, ranging from .88 to .99 for the total agreement method. Mean *pi* for the fractional approach was .98 and for the total agreement approach .94. Although there are no clear-cut guidelines as to appropriate *pi* levels for interrater reliabilities, these levels of agreement among researchers were very high and considered acceptable.

Procedure

For each message analyzed, content analysis began with an initial reading of the HEDIR message, without completing the checklist. The investigator then inspected the message header for sender information. The next portion of the checklist to be completed was the format section, containing information about sender affiliation, copied messages, and attachments. Next the health and professional content of the message was interpreted. Finally, the remaining items of the checklist, pertaining to message purpose, were evaluated. After the checklist was completed, responses were transferred onto a computer sheet for scanning.

Following the pilot test, a census of 794 archived HEDIR messages, dating from January 1 to July 3, 2001, were downloaded and printed from the HEDIR Web site. These messages were divided into four equal portions and distributed among the four investigators for content analysis. Scan sheets were collected after 2 weeks and scanned, and data were transferred into SPSS format for analysis. Basic descriptive statistics were computed, primarily frequencies and percentages, for each item on the inventory.

RESULTS

Only slightly more senders were women (51.3%) than men (42.4%), and in 6.3% of messages the gender of the sender was unclear from the contents of the message or message header. In 366 messages (46.1%) the professional identity of the sender was not provided or was unclear. However, among those messages for which the professional identity of the sender was discernible, a plurality of messages was sent by university professors or instructors (33.8%), followed by other noninstructional university employees (20.8%) and community health professionals (15.1%). Less than 1% of messages were sent by school health educators, and almost 2% of messages were sent by foreign participants.

Nearly half of all messages contained the sender's title or professional affiliation (48.9%), and 41.4% of messages contained information on the sender's employer or organizational affiliation. Fully 59.9% of messages included the sender's address and/or phone, fax, e-mail, or Web site information. Only 17.1% of senders attached copies of one previous message to their replies, and 5.0% of senders included copies of two or more previous messages. Slogans, adages, poems, quotations, or other inspirational materials were included in 4.5% of messages analyzed.

Under the major inventory headings, unsolicited provision of information represented the largest number of messages (47.4%). Less than one third of messages (27.5%) were inquiries for information, and 26.1% were responses to inquiries for information. Although only 2.3% of messages involved inquiries for opinion, the fourth largest general category of messages was responses to inquiries for opinion (15.7%). The most frequently selected inventory item was unsolicited referral to a Web site (*n*=119; 15.0%). Excluding content descriptors, the next three most frequently checked inventory items were response to inquiry, Web site/Internet information (*n*=76; 9.6%); response to inquiry for opinion, not fitting into any subcategory (*n*=62; 7.8%); and inquiry for information, not fitting into any subcategory (*n*=55; 6.9%).

Most inquiries for information (*n*=55, 25.2%) were general and did not fit into any of the inventory items in that section. Among the remaining inquiry for information inventory items, 16.1% (*n*=35) were inquiries for information on community health education and programs, 14.7% (*n*=32) were inquiries for information about school health curricula, and 11.9% were questions concerning research data on a variety of subjects. The provision of information about Web sites and the Internet was the most common response to information inquiry (*n*=76; 36.7%), followed by responses to information inquiries that did not fit into a subcategory (*n*=40; 19.3%), responses to inquiries about school curricula (*n*=19; 9.2%), responses to inquiries about community health education and programs (*n*=12; 5.8%), and responses to inquiries for information about survey instruments and research methodology (*n*=12; 5.8%).

There were fewer inquiries for opinion than for information. The largest proportion of opinion inquiries did not fit in any of the inventory subcategories (*n*=7; 38.9% of opinion inquiries), followed by inquiries for opinions on school health issues (*n*=5; 27.8%) and on community health issues (*n*=4; 22.2%). Despite the low number of opinion inquiries, this small number of inquiries elicited a large number of responses. The majority of opinion responses did not fit in any subcategory (*n*=62; 49.6%), and 30.4% (*n*=38) were follow-ups to original requests or summaries of responses received. Twelve opinion responses (9.6%) pertained to community health issues and five (4.0%) were apologies for previous messages (Table 2).

The extent to which electronic mailing list inquiries for information or opinion elicited responses was of great interest in this study. Clearly, the relationship between

Table 2. Section C: Exchange of Ideas, Inquiry

Inventory Item	Frequency	% of Info Inquiries	% of Idea Exchange	% of All Messages
Inquiry, information (does not fit in a subcategory)	55	25.2	23.3	6.9
Inquiry, information, curriculum, school, any level	32	14.7	13.6	4.0
Inquiry, information, individual contact information	1	.5	.4	.1
Inquiry, information, community health education and programs	35	16.1	14.8	4.4
Inquiry, information, textbook(s)	14	6.4	5.9	1.8
Inquiry, information, research data/research literature/interpretation	26	11.9	11.0	3.3
Inquiry, information, survey instrument/methodology	20	9.2	8.5	2.5
Inquiry, information, Web site/Internet	20	9.2	8.5	2.5
Inquiry, information, organization/agency/association	4	1.8	1.7	.5
Inquiry, information, individual or organization phone, e-mail, fax, etc.	5	2.3	2.1	.6
Inquiry, information, employment professional opportunities	6	2.7	2.5	.8
Total, inquiry, information	**218**	**100.0**	**92.4**	**27.5**

Inventory Item	Frequency	% of Opinion Inquiries	% of Idea Exchange	% of All Messages
Inquiry, opinion (does not fit in a subcategory)	7	38.9	3.0	.9
Inquiry, opinion, community health issue	4	22.2	1.7	.5
Inquiry, opinion, school health issue	5	27.8	2.1	.6
Inquiry, opinion, technology in health education	1	5.6	.4	.1
Inquiry, opinion, professional training/development	1	5.6	.4	.1
Total, inquiry, opinion	**18**	**100.0**	**7.6**	**2.3**

inquiries and related responses to those inquiries is an appropriate indication of the success of the electronic mailing list in meeting its objectives. To measure the level of response to electronic mailing list inquiries, the ratio of responses to inquiries for information/opinion to inquiries for information/opinion was computed for each of the items. This computation resulted in the number of responses relative to each inquiry. As depicted in Table 3, inquiries for opinion generated much greater response than did inquiries for information. Only two types of information inquiry, for Web site or Internet information and for information about employment or professional opportunities, elicited response: inquiry ratios greater than 1.00 (3.80:1 for Web site information; 1.33:1 for employment information). In other words, for every inquiry for Web site/Internet information, almost four responses were submitted. For every inquiry for employment information, slightly more than one response was received by the electronic mailing list. On the other hand, inquiries for opinion generated substantial numbers of responses in nearly every subcategory. The response: inquiry ratio for inquiries for opinion that did not fit in any subcategory was 8.86; 4.00 for inquiries for opinion on technology in health education; and 3.00 for inquiries for opinion on community health issues.

The inventory category that elicited the largest proportion of electronic mailing list messages (47.4%) was unsolicited provision of information. These included unsolicited statements pertaining to areas of health education practice and theory, unsolicited referral to Web sites or journal articles, requests for participants in research studies, notification of personal or organizational change, and simple list management tasks. As already noted, the single most frequently checked item in the entire inventory was in this category, referral to Web site, not in response to any inquiry (*n*=119; 31.6% of category; 15.0% of all messages). The next most prevalent item in this category, general unsolicited provision of information not fitting in any other category, accounted for 11.4% of messages. Other common items in this category included referral to journal/magazine articles, not in response to an inquiry (*n*=31; 8.2%); purely personal statements, not pertaining to health education or professional practice (*n*=26; 6.9%); general statements of opinion, not fitting in any of the other inventory items (*n*=22; 5.9%); and notification of advocacy opportunities, solicitation of advocacy (*n*=19; 5.1%). Electronic mailing list management tasks, whether initiated by the list manager or by individual members of the list, were also common: 7.2% in this category were requests to unsubscribe or subscribe, 4.5%

Table 3. Section C: Exchange of Ideas, Response

Inventory Item	Frequency	% of Info Responses	% of Idea Exchange Responses	% of All Messages	Ratio, Response: Inquiry (:1)
Response to inquiry, information (does not fit in a subcategory)	40	19.3	12.0	5.0	.73
Response to inquiry, information, school curriculum	19	9.2	5.7	2.4	.59
Response to inquiry, information, contact information	0	0	0	0	—
Response to inquiry, information, community health ed. and programs	12	5.8	3.6	1.5	.34
Response to inquiry, information, textbook(s)	11	5.3	3.3	1.4	.79
Response to inquiry, information, research data/lit./interp., primary source	8	3.9	2.4	1.0	.88[A]
Response to inquiry, information, research data/lit./interp., secondary source	5	2.4	1.5	.6	—
Response to inquiry, information, research data/lit./interp., nature of source unclear	10	4.8	3.0	1.3	—
Response to inquiry, information, survey instrument/methodology	12	5.8	3.6	1.5	.60
Response to inquiry, information, Web site/Internet	76	36.7	22.9	9.6	3.80
Response to inquiry, information, organization/agency/association	2	1.0	.6	.3	.50
Response to inquiry, information, individual or organization phone, e-mail, fax, etc.	4	1.9	1.2	.5	.80
Response to inquiry, information, employment professional opportunities	8	3.9	2.4	1.0	1.33
Total, response to inquiry, information	207	100.0	62.3	26.1	

Inventory Item	Frequency	% of Opinion Responses	% of Idea Exchange Responses	% of All Messages	Ratio, Response: Inquiry (:1)
Response to inquiry, opinion (does not fit in a subcategory)	62	49.6	18.7	7.8	8.86
Response to inquiry, opinion, community health issue	12	9.6	3.6	1.5	3.00
Response to inquiry, opinion, school health issue	3	2.4	.9	.4	.60
Response to inquiry, opinion, technology in health education	4	3.2	1.2	.5	4.00
Response to inquiry, opinion, professional training/development	1	.8	.3	.1	1.00
Apology for previous message	5	4.0	1.5	.6	
Follow-up to original request/summary of responses received	38	30.4	11.4	4.8	
Total, response to inquiry, opinion	125	100.0	37.6	15.7	

[A]Ratio of responses to inquiries for research literature and interpretation was computed for all responses combined.

were list management activities by the list manager, and 2.9% involved notification of individuals' new e-mail or Web addresses (Table 4).

One of the primary objectives of HEDIR is to facilitate professional development and communication among groups and individuals in the discipline. As already noted, 6.4% of messages included announcements of positions, 5.7% included calls for papers/abstracts or announcements, upcoming conferences, or seminars; and 7.9% included forwarded materials, most often of a professional nature. To a lesser degree, the inventory attempted to gauge the scope of specific health content, as well as professional education and development content, in electronic mailing list messages. The extent to which messages posed questions pertaining to specific populations by age, race, or risk status was also measured by the instrument. A total of 250 messages (31.5%) contained clearly discernible health content. The greatest proportion of these messages addressed sexual behavior or sexuality (not pregnancy or reproduction) (n=80; 32.0%), followed by health content areas not represented by the inventory items (n=42; 16.8%), alcohol or drug use/abuse (n=31; 12.4%), and tobacco and cigarette smoking

Table 4. Section D: Unsolicited Provision of Information

Inventory Item	Frequency	% of Section	% of All Messages
Unsolicited provision of information, general	43	11.4	5.4
Statement of opinion, general	22	5.9	2.8
Statement of opinion, community health issue	10	2.7	1.3
Statement of opinion, school health issue	13	3.5	1.6
Statement of opinion, work site health issue	0	0	0
Statement of opinion, clinical health issue	1	.3	.1
Statement of opinion, theoretical foundations of professional practice	2	.5	.3
Info statement, general health content	17	4.5	2.1
Info statement, health education theory/practice	8	2.1	1.0
Info statement, personal, not health/ professional related	26	6.9	3.3
Referral to journal/magazine article(s), not response to inquiry	31	8.2	3.9
Referral to Web site, not response to inquiry	119	31.6	15.0
Computer/Internet virus information	4	1.1	.5
Hoax information	0	0	0
Request for research/survey participants, not forwarded	6	1.6	.8
Request to unsubscribe/subscribe	27	7.2	3.4
Notification of new e-mail/Web address	11	2.9	1.4
Notification of advocacy opportunity/ solicitation of advocacy	19	5.1	2.4
List management activity	17	4.5	2.1
Total, unsolicited provision of information	376	100.0	47.4

(*n*=30; 12.0%). Only 4.7% of messages contained clearly identifiable professional content relevant to areas such as preparation of health educators, university program development and administration, CHES certification, and academic department structure or function. The most frequent professional content area was undergraduate or graduate preparation of health educators (*n*=22; 59.5% of professional content messages).

More than 10% of messages (*n*=83) directly addressed the health education needs of specific age groups. Adolescent/young adults were the age group most frequently discussed in electronic mailing list messages (*n*=52; 6.5% of all messages). Only 1.4% of all messages involved issues related to specific racial/ethnic groups, with the greatest proportion of these messages addressing the needs of African-American individuals (*n*=4; .5% of all messages).

DISCUSSION OF FINDINGS

This study was motivated by two principal objectives: (1) to describe the nature of e-mail messages to the HEDIR electronic mailing list and (2) to determine the extent to which the HEDIR electronic mailing list is currently achieving its own stated objective of providing subscribers with a vehicle through which they can "share thoughts, ideas, job announcements, conferences (and calls for papers), requests for ideas, etc.… to help health educators communicate more effectively and efficiently."

It is important to note that HEDIR members may choose to respond directly to a message sender, resulting in their response not being posted to the entire group. In other words, it is possible that inquiries for information or opinion are generating more responses than are indicated in this study. Only those responses posted to the entire group appear in the archives.

Although HEDIR is open to professional health educators in diverse work settings and roles, it remains predominately the province of university professors and noninstructional university employees. Less than 20% of all messages for which the identity of the sender was clear were sent by community health professionals or school health educators. Only a minute proportion of messages were sent by individuals outside the United States. Electronic mailing list activity does not appear to be dominated be either men or women. The largest proportion of electronic mailing list messages amounted to unsolicited communications of some sort, from provision of information about interesting Web sites to statements of opinion about pertinent health topics. Although these e-mailed comments often elicited responses from electronic mailing list members, their explicit intent was not to generate discussion, but rather to simply inform the membership. The degree to which the electronic mailing list is serving as an effective means for exchange of information and opinions is reflected by the large number of messages that are either inquiries for information or opinions, or responses to those inquiries. The location and nature of Internet resources for health information dominate discussion, and thereby facilitate communication between health educators about technical issues. The largest proportion of responses to information inquiries concern Web sites, and the most frequent single inventory item is unsolicited Web site information.

One third of all sampled messages contained clear references to specific health content. The inventory included nine distinct health subjects, and the largest proportion concerned sexual behavior and sexuality. When reference was made to a health topic, however, most often it did not involve statements or requests for factual information. Rather, the majority of such e-mails involved requests for information or opinions about research findings,

curricula and programs, Internet resources, health behaviors of specific risk groups, and professional development, all with relation to a health subject.

The HEDIR electronic mailing list was always intended as an efficient means of exchanging information about professional development opportunities, position announcements, and calls for papers. Clearly, announcements such as these are being posted to the list, with nearly 8% of messages fitting in this general category. However, the actual effectiveness of the electronic mailing list as an avenue for informing the community of professional opportunities was not explicitly measured by the instrument, nor was it a focus of this study. Perhaps that important issue will be the focus of future research delving into methods of professional recruitment in health education. The most common professional development item was position announcements for university professors or administrators, constituting 3.1% of total message volume.

The extent to which personal, off-topic content seeps into electronic mailing list exchanges is a reflection of the diligence of the moderator in controlling access. Although electronic mailing list participants are, at times, annoyed by the appearance of sales promotions and other sorts of "spam," these types of messages were rare among the sampled messages. Among the almost 800 sampled messages, only 14 (2.4%) were advertisements, and a mere handful were classified as humor or "chain letters." Beyond the more obvious profit-oriented spam, other instances in which personal emotion, motivation, or agenda made their way into messages were hard to pin down. Inspirational messages and prose (1 message) and slogans, adages, poems, or quotations (4.5% of messages) were explicitly noted in the inventory. However, anecdotally, it was not unusual to observe particular conversation threads sparking strong emotion or personal attacks that were not reflected on the instrument, and thus, were not recorded. At the time the instrument was developed, it became clear that judging subtle nuances of implied meaning in what appeared to be possibly hostile or defensive personal statements was extremely difficult and subject to opinion. For that reason, no attempt was made to classify and record such statements.

Probably the clearest indicator of electronic mailing list effectiveness is the measure of responses to e-mailed requests for information or opinions. As stated earlier, inquiries for information generated far fewer responses than did inquiries for opinion. In only one category of information request was the ratio of the number of responses to the number of inquiries more than 1.0: employment and professional opportunities. On the other hand, in only one category of opinion requests was the ratio of response to inquiries less than 1.00: school health issues. In all other categories of opinion request the ratio of responses to inquiries was 1.00 or greater. For items in which the ratio of response to inquiries was less than 1.00, one may interpret these findings as meaning that significant numbers of inquiries for information elicited no response whatsoever from list members. Thus, for the purposes of motivating online dialogue on matters of opinion, HEDIR is proving highly effective. But when it comes to serving as a resource for information, in most instances it appears to be coming up short.

Finally, it is interesting to compare the results of this study with the results of the earlier HEDIR content analysis (Welle, Kittleson, & Ogletree, 1995). It is evident that in some respects the scope and impact of the professional health education electronic mailing list has changed considerably since its inception in 1994. It is possible that some of these differences may be attributable to the greater degree of detail in this more recent inventory. Welle and colleagues categorized electronic mailing list messages into eight general "themes." The current inventory included four of the same general subject headings, but further subdivided these headings into distinct inventory items, permitting more detailed analysis but also hampering comparison with the earlier study.

In the 1995 study the largest proportion of messages (20.4%) were in the information request category. This general category of messages was third most prominent in the recent study, accounting for 26.1% of e-mails to the list. One aspect of the two studies, however, that is not different is the extent to which inquiries for information elicited responses from the list. In the 1995 study, replies to information requests accounted for the lowest proportion of messages (6.5%), even though request for information was the largest category. The second largest category of messages in 1994 was error messages, an item that was not specifically included in the recent study but was subsumed under the item "list management activity," which accounted for only 2.1% of total messages. The frequency of error messages in the early years of the electronic mailing list likely reflects the inexperience of its membership, which is now considerably more adept at navigating Internet communication networks. Similarly, the third largest category of messages in the earlier study (14.9%) was HEDIR discussion, which is described as "communication among HEDIR members regarding correct usage of the electronic mailing list and requests to join." In the current study, requests to subscribe/unsubscribe to the list accounted for only 3.4% of messages, and general list management activity only 2.1% of the messages volume. In 1994 a total of 22% of messages were classified as either job announcements or professional growth, and in the recent study this category of messages accounted for 12.1% of messages, considerably less. A possible explanation for this difference is the gradual proliferation of Web site job postings and Web sites that promote and advertise opportunities for professional growth. It is less necessary today for health education professionals to share this type of information that can be readily obtained through simple Web browsing.

The HEDIR Web site and electronic mailing list remain popular Internet locations at which health education professionals solicit and exchange information and

advice, announce position openings, and otherwise conduct the business of their discipline. There exists great faith that technology is living up to its potential, because of its inherent complexity and rapidly increasing pervasiveness. But, as in all areas of practice, it behooves us to continue to test this faith by systematically evaluating the manner in which technology, in this case HEDIR, is fulfilling its mission as a forum for the movement of ideas among health education professionals.

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